

**IEEE1394A FireWire/Hi-Speed USB2.0
3.5” Hard Drive Data Encrypt Enclosure
PHR-100ACE**



User's Manual

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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference and (2) this device must accept any interference received, including interference that may cause undesired operation.

Operation of this equipment in a residential area is likely to cause interference in which case the user at his or her own risk and expense will be required to correct the interference.

Declaration of Conformity

Part2 Research declares that the PHR-100ACE conforms to the following standards, in accordance with the provisions of the EC Directive 89/366/EEC: EN 55022 (CISPR 22:1985), Class A.

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Part2 Research Inc.,. warrants that this product will be free from defects in title, materials and manufacturing workmanship for one year from the date of the purchase. If the product is found to be defective then, as your sole remedy and as the manufacturer's only obligation, Part2 research will repair or replace the product.

This warranty is exclusive and is limited to PHR-250CC. This warranty shall not apply to products that have been subjected to abuse, misuse, abnormal electrical or environmental conditions, or any condition other than what can be considered normal use.

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IMPORTANT: Please Read Before Using Encrypt Keys!

Please read it thoroughly before using PHR-100ACE encrypt enclosures, and save this note for future reference use.

1. For security purposes, the encrypt keys cannot be duplicated. Without the matching encrypt key, your data in the hard disk cannot be accessed. Please keep the keys in a safe place.
2. Each encrypt enclosure comes with a unique pair of keys. After using the first key to format the hard drive, we recommend you to try the second key to confirm both keys can access the same hard drive and data. Then put the second key in a safe place. If the second key cannot access the same data, please back up the data and contact us for key replacement.
3. Different enclosures come with different pair of keys, they are not interchangeable. If you own multiple encrypt enclosures, please label enclosures and keys properly.
4. The hard drive will not be mounted on the computer if a wrong encrypt key is used. Please be aware, running any Disk Utility, Disk Management or 3rd party software to access the hard drive with the wrong encrypt key can damage the security encoding on the hard disk, and data will be lost.
5. When one encrypt key is lost, please purchase a new pair from us. The new keys will be different from your existing ones. Please back up all data in the hard drive with your existing second key. When the new keys arrive, plug in the new key with the enclosure powered off. Power on again, reformat the hard drive and restore the data from your back up. You can discard your existing key.
6. If the correct encrypt key is used but the hard drive cannot be mounted, please contact our technical support for assistance. If you return the defective enclosure to us for replacement, **PLEASE KEEP BOTH KEYS AND THE HARD DRIVE WITH YOU!** Please note that, in order to access the original data in a new enclosure, you must have the original key.

Introducing IEEE1394A FireWire/Hi-Speed USB2.0 3.5" Hard Drive Data Encrypt Enclosure-PHR-100ACE

Thank you for choosing the PHR-100ACE aluminum IEEE1394A FireWire/Hi-Speed USB2.0 3.5" Hard Drive Data Encrypt Enclosure. This is an Aluminum enclosure which support 3.5" IDE Hard drive. It is simple to install and comes with all the parts you need to create an external IEEE1394A FireWire/ Hi-Speed USB2.0 device.

About This Guide

Before you begin using the PHR-100AC, be sure to read this manual in its entirety.

This guide contains:

- Introducing IEEE1394A FireWire/Hi-Speed USB2.0 3.5" Hard Drive Data Encrypt Enclosure
- Hardware Installation
- Software Installation

System Requirements

For Mac

- Any Macintosh desktop or PowerBook computer with an available FireWire or USB port
- MacOS 9.X, FireWire support 2.4 and up, and/or USB support 1.4.1 and up for USB1.1 Speed
- MacOS X for USB2.0 Hi-Speed (USB2.0 Host adapter required)

For PC

- Pentium II/compatible or above with an available 1394A FireWire or USB port
- Windows98 SE, Windows2000, WindowsME or WindowsXP
- USB2.0 host adapter is required for Hi-Speed USB2.0 transfer speed

Package Contents

The PHR-100ACE-Aluminum IEEE1394A FireWire/Hi-Speed USB2.0 3.5" Hard Drive Enclosure package includes the following software and documentation:

- The software CD contains the drivers and manual
- 6 pin to 6 pin FireWire Cable
- USB2.0 cable
- IEEE1394A FireWire/Hi-Speed USB2.0 2.5" Hard Drive Enclosure
- 2 x Secure Keys
- AC/DC Adapter

Safety Precautions

ON INSTALLATION

1. To reduce the risk of fire or electric shock, do not expose this product to rain, water or moisture.
2. Do not place any containers with liquids (drinking glass, flower vase, etc.) or containers with small metal parts (paper clips, etc.) on top of the unit.
3. According to standard industry practice, surge protection is recommended for all telecommunications devices. Surge suppressors and/or line conditioning should be used on the input power supply.

ON OPERATION

- Do not move the chassis during operation. Doing so may cause a malfunction.
- Protect the unit from shocks and vibrations.
- Do not use the subsystem in areas exposed to oily smoke or steam, such as a kitchen or close to a humidifier.
- Do not use the subsystem in locations exposed to rain or splashes of water, such as outdoors, in a bathroom, or close to a window.
- Do not use the subsystem on an unstable or slanted surface without proper support.
- Do not expose the unit to direct sunlight or hot air where the temperature could exceed 45°C, or very cold locations where the temperature is below 0°C.
- Keep the power cord away from hot appliances.
- Do not touch the power cord with wet hands.

ON TRANSPORTATION

Save the packing materials as you may need to repack and transport the unit at a later date.

Always remove the disc before moving the unit.

ON POWER SOURCES

When you are not using the unit for a long time, disconnect the power cord from the unit.

To unplug the AC power adapter from the wall outlet, grasp the adapter itself. Do not pull the cord.

Warning

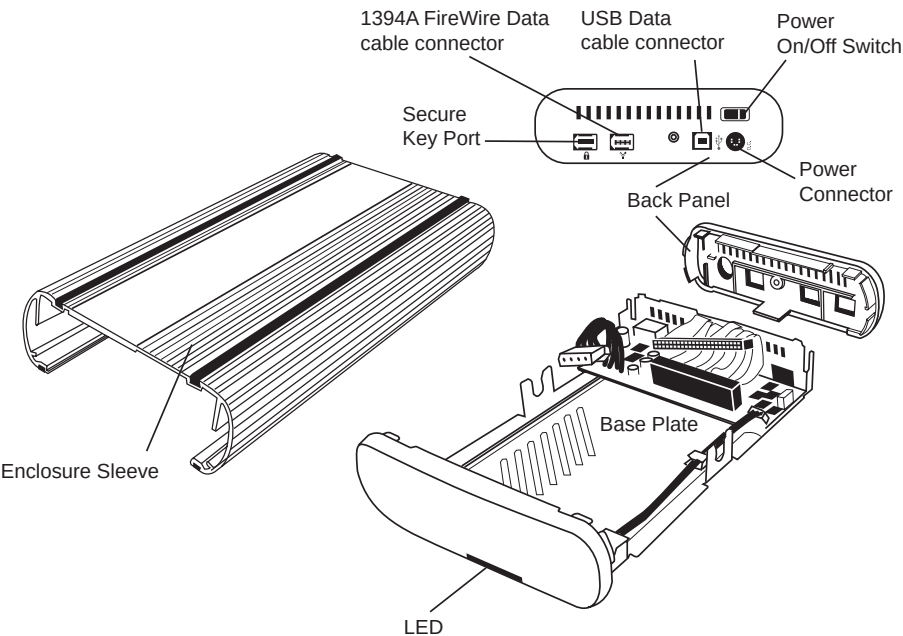
If any of the following conditions occur, immediately disconnect the power cord from the wall outlet and contact your dealer or an authorized service station. Continuing to use the computer involves the risk of fire and electric shock.

- Smoke or unusual smell is coming from the subsystem.
- Water has entered the unit, or the unit has become wet.
- A foreign object has entered the unit.
- The unit has been dropped or the front panel or frame has been damaged.
- The power cable is damaged, causing wire breakage or exposed leads.

Hardware Basic

Precaution:

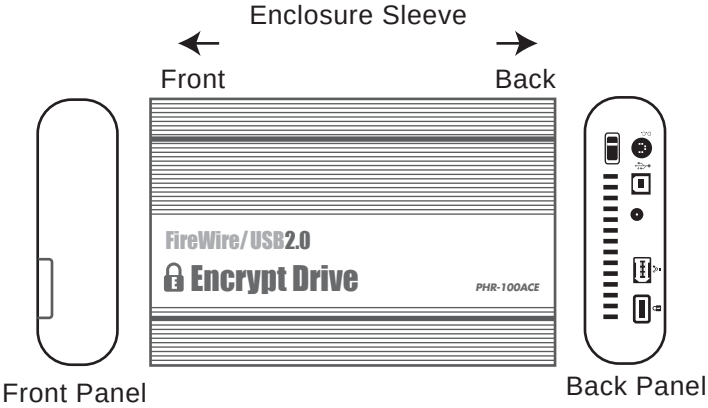
Please make sure your hand is dry and remove static from your body by touching metal parts of your computer chassis.



Package Content:

- | | |
|------------------|---|
| Enclosure Sleeve | 2 Secure Keys |
| Base Plate | 1 USB Data Cable |
| Back Panel | 1 FireWire 6 pin to 6 pin Data Cable |
| AC Adapter | 1 - 5mm Diameter Screws |
| | 4 - Anti-Shock Mount with 10mm diameter screw |

Hardware Installation



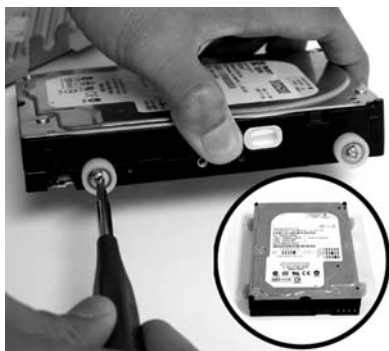
1. Unscrew to loosen the Back Panel and remove the Back Panel from the Enclosure.



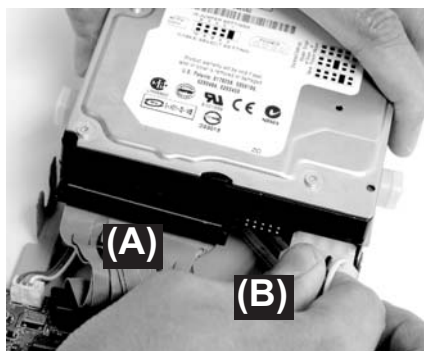
2. Use your thumb to push the Base Plate out.



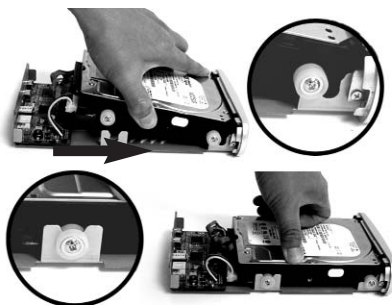
3. Set the Enclosure Sleeve aside.



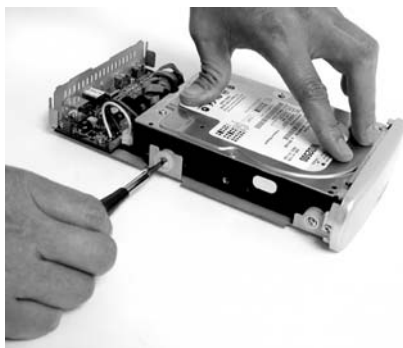
4. Install 4 white Anti-Shock Mounts w/10mm screw into both sides of the hard drive. Do not tighten the screws yet.



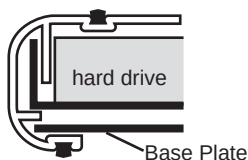
5. Set up the jumper ID as "Master" mode according to the HDD jumper setting spec or "Single Master" mode for Western Digital model hard drive. Connect (A) the 40-pin connector and (B) the power connector from the Base Plate securely to the hard drive.



6. (1) Slide the hard drive into the front Base Plate first and (2) press down on the hard drive, make sure all 4 Anti-Shock Mounts sit inside the Support Slot.



7. Pressing down the hard drive and tighten all 4 screws to secure the hard drive to the Base Plate.



8. Align the Base Plate to the Sleeve Slot. Slide and push the hard drive/Base Plate into the Enclosure Sleeve



9. Install the Back Panel to the Enclosure..

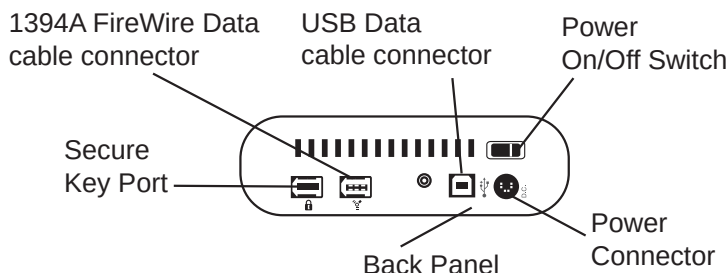


10. Secure the Back Panel with the 5mm screw



11. Plug in secure key, plug the AC adapter into the Enclosure and turn the power switch on. You may now connect the unit to your computer using a USB or FireWire Cable.

Secure Key



Macally Firewire/USB2.0 Data Encrypt enclosure comes with two identical secure keys, which are powered by NIST and CSE certified DES 40-bit encryption engine. Depending on OS, it provides real-time, automatic hardware based bit-by-bit data encryption to entire hard drive including boot sector in the enclosure. With Macally Encrypt enclosures, data security could never be simpler and easier. All you have to do is, plug one secure key into the secure key port with lock symbol, then power on and connect the enclosure to computer, use it just like a regular hard drive enclosure.

The secure key is needed for both Firewire and USB connection, and should remain plugged while enclosure is in use. Without the key, computer can't detect the enclosure at plug-in. Data Encrypt enclosures come with different keys in different packages, keys are not interchangeable. If you have multiple Data Encrypt enclosures, please mark your keys and enclosures properly.

Since secure key is the only authentication to access your data, please do not lose your secure keys. One good practice is to put one key in your keychain, and keep the second key in a safe place for future use. If the hard drive is removed outside the enclosure, the hard drive appears as a raw hard drive, the data is simply not accessible. If the enclosure becomes defective within warranty period, please keep your hard drive and the secure keys, get a new enclosure replacement from us, install the hard drive and use the original keys to mount the drive to access data. If a new key is used, computer will detect the enclosure as a brand new hard drive, once formatted again, previous data on the hard drive is lost.

As a precaution, you should frequently back up data on the enclosure to other secure location.

Software Installation

Software Installation for Mac

MacOS Software Installation

FireWire Connection for MacOS

MacOS will recognize the enclosure automatically, initialize (if the drive is not initialized) and mount the drive to desktop.

USB2.0 Connection for MacOS

MacOS will recognize the enclosure automatically, initialize (if the drive is not initialized) and mount the drive to desktop.

* Plug in the USB2.0 enclosure and it is ready to use. For USB2.0 performance, you must plug the enclosure into a USB2.0 port and Mac OS X, or you will get USB1.1 performance only.

Note: Whether it is FireWire or USB Connection, MacOS provides a Disk Utility to create multiple volumes, which is located in Utilities folder inside Applications folder.

Software Installation for PC

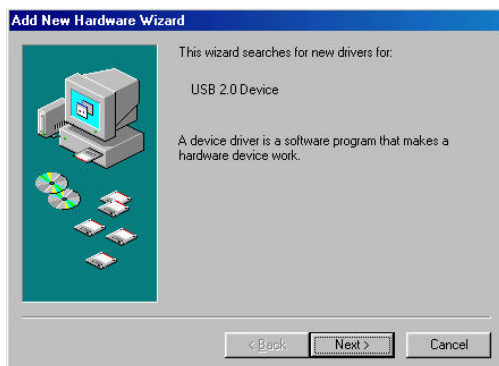
IEEE1394 FireWire Connection for Windows98SE/ME/2000/XP

Plug the IEEE 1394 cable into any available port, Windows(98,ME,2000 or XP) will start installing for the proper driver. Please follow the on screen instruction to complete the driver installation. (You may need the Windows CD during the installation.)

USB Connection for Windows ME/2000/XP

Plug the USB cable into any available port, Windows(,ME,2000 or XP) will start installing for the proper driver. Please follow the on screen instruction to complete the driver installation. (You may need the Windows CD during the installation.)

USB Connection for Windows98SE



Power on the USB2.0 Enclosure and plug the USB cable into your USB2.0 port. The “Add New Hardware Wizard” should automatically appear as shown above. Click “Next” when this window appears.



Choose “Search for the best driver for your device.” And click “Next”.



Select on the “Specify a location” option and type in “x:\PHR-100ACE\DRIVERS” where “x” is the letter of the CD-ROM drive with the Drivers CD inserted, or click on “Browse” to choose the corresponding driver folder in the CD. Then click “Next”.



Windows will search the location and find the appropriate driver from the Drivers CD. Click “Next”.



The window shown above indicates that the driver installation has been completed. Click “Finish” to end the installation.

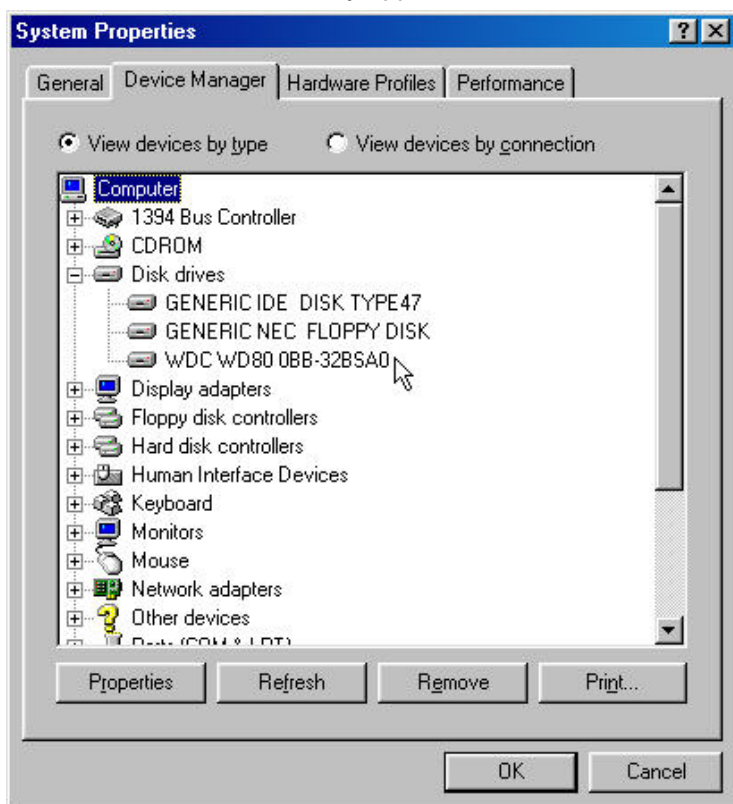
After the installation, you will get USB2.0 Hi-Speed performance, if PHR-100ACE is connected to USB2.0 host adapter; if connected to USB1.1 port in your computer, you will get USB1.1 speed only.

Note: If you don't see the new drive letter added in My Computer after driver is loaded properly, the reason could be the hard disk has no partition and format yet, please partition and format the drive in the enclosure before using it.

IDE Hard Drive Partition and Format procedures in PC:

For Windows98SE/ME

If a new hard disk icon dose not appear in "My Computer", check device manager under system in the control panel. Then double click on "Disk Drives" to see if a new entry appears.

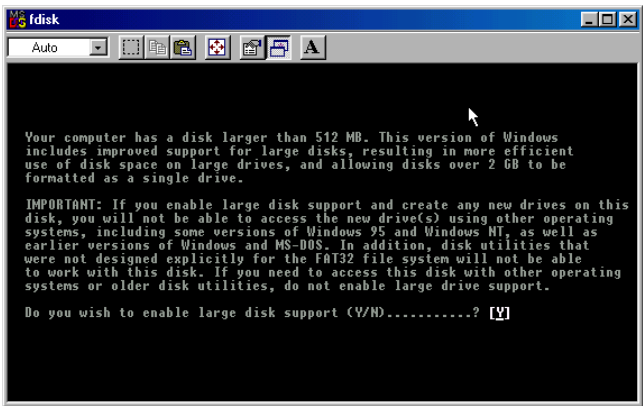


If you can see a new entry as shown (Example, WDC WD80 OBB-32BSA0) above, you are ready to partition and format the drive.

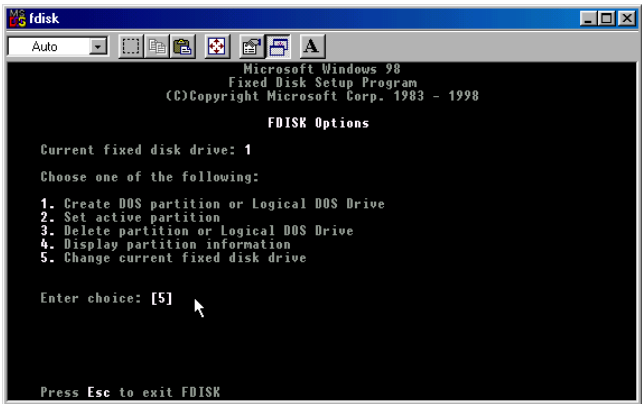
1. Please run FDISK utility from MS-DOS command prompt.



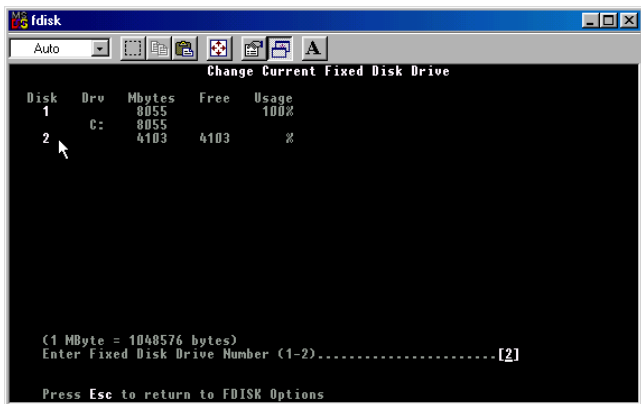
2. Follow the screens below to complete the Hard Disk Partition.



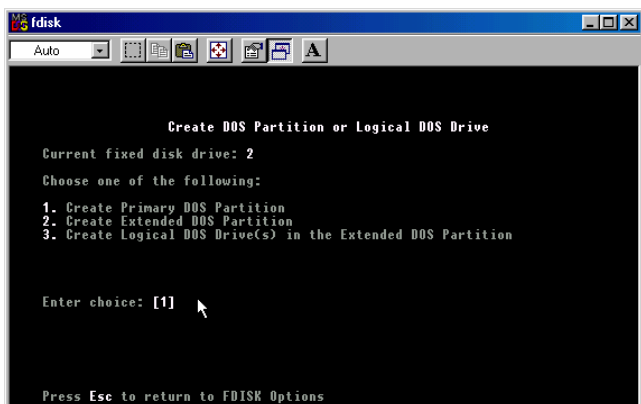
Step 1



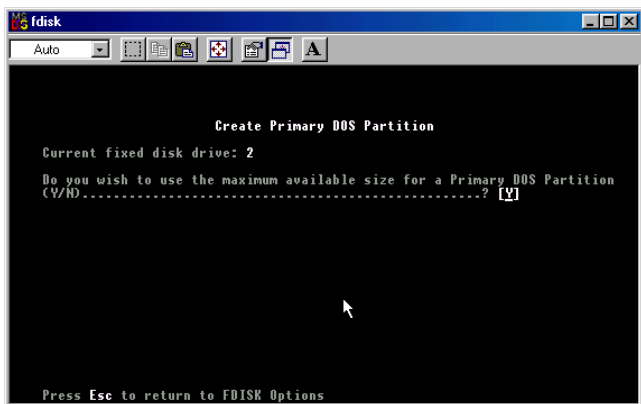
Step 2



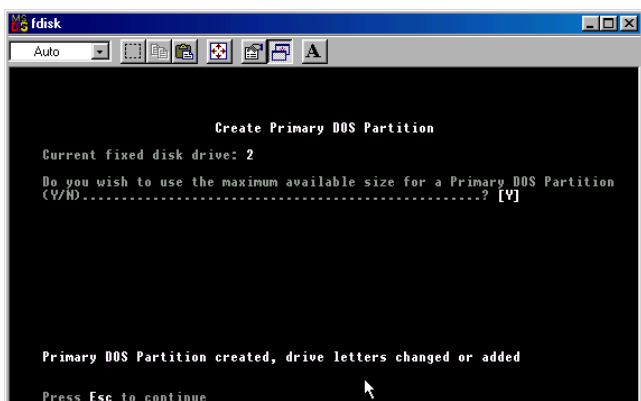
Step 3



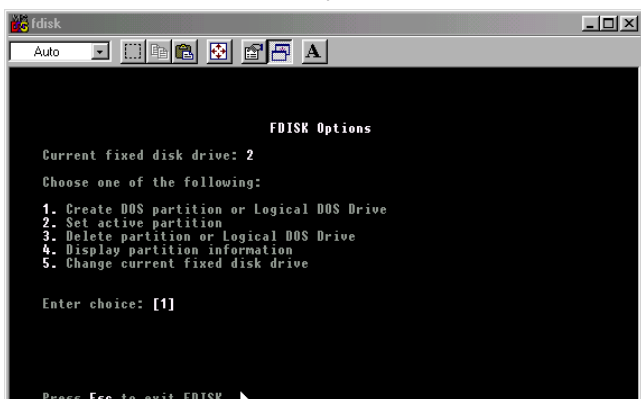
Step 4



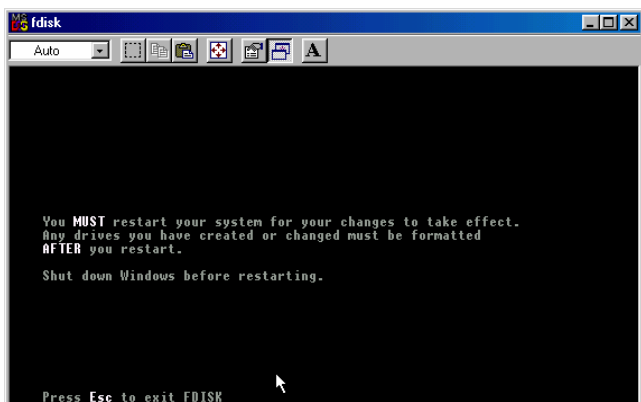
Step 5



Step 6



Step 7



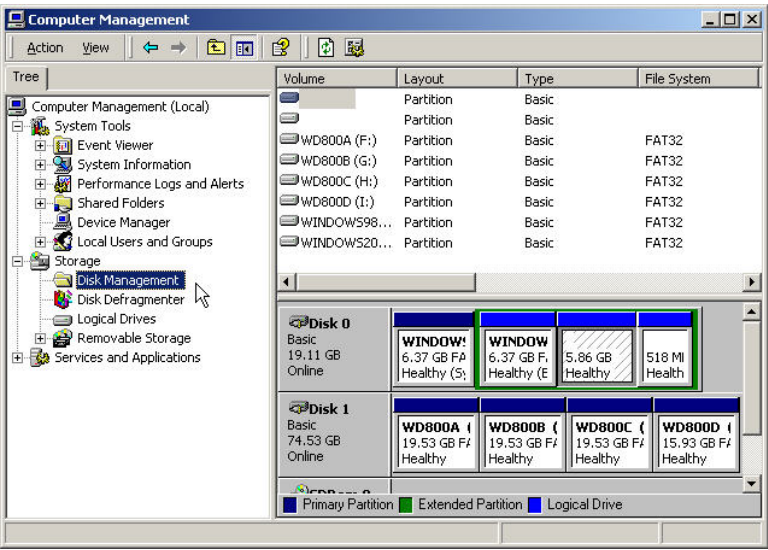
Step 8

3. After restart the computer, please verify the new drive in "My Computer".
4. Please do a full format to the hard drive before using it.

For Windows2000/XP

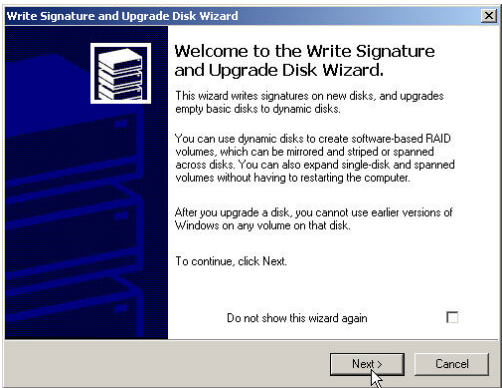
If you can see a new entry under Disk drives of Device Manager, you are ready to partition and format the drive.

1. Open Control panel, “Administrative Tools” and “Computer management”.



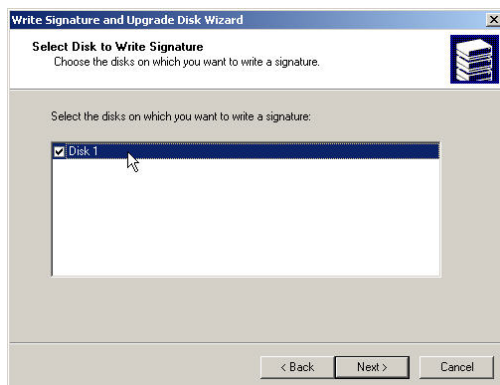
Step 2

2. Click on “Disk Management”.



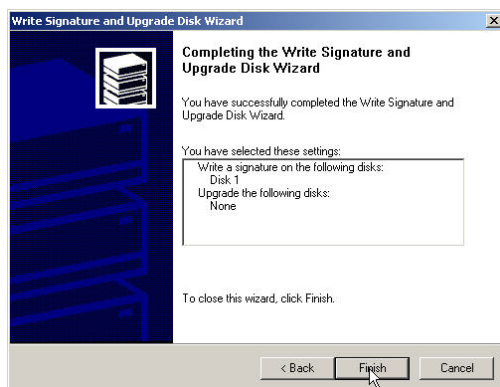
Step 3

3. “Write Signature and Upgrade Disk Wizard” windows will show up and click “Next”.



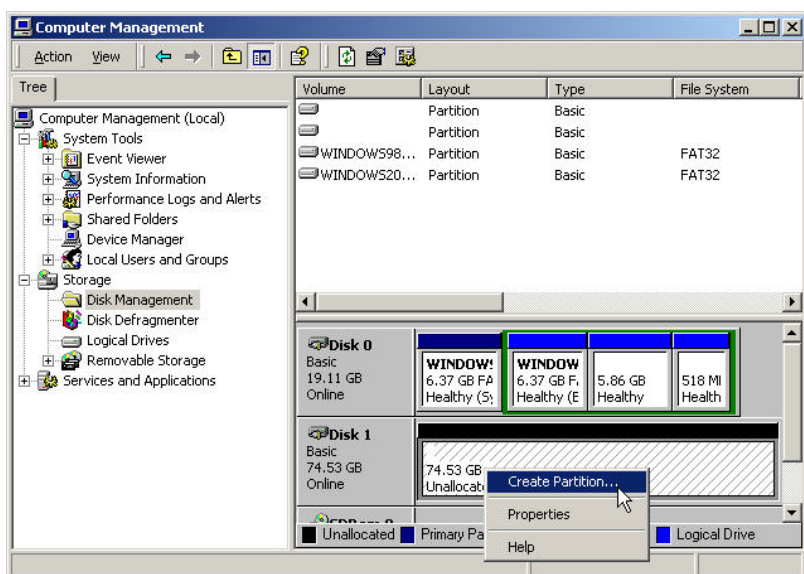
Step 4

4. Write a signature to the new drive, click “Next”.

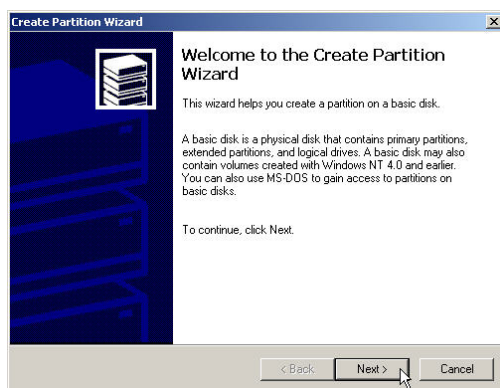


Step 5

5. Click “Finish” to close the wizard.



6. Select the new “Unallocated” disk, and then right click to choose “Create partition”.



Step 7

7. Follow the onscreen instruction to partition and fully format the drive.*
 *note: If it assigns a new hard drive letter but format dose not run automatically, please exit “Computer Management”, and find the new drive letter in My computer to format it completely.